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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/841,644	04/30/1997	SHUNPEI YAMAZAKI	0756-1603	3399

7590 03/21/2006  
Eric J. Robinson  
Robinson Intellectual Property Law Office  
21010 Southbank Street  
PMB 955  
Potomac Falls, VA 20165

EXAMINER
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SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

08/841,644

Applicant(s)

YAMAZAKI ET AL.

Examiner

Laura M. Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/2/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant filed a response to demonstrate support for claim 23 which includes a chart mapping support for the claims within the specification.

However, the chart still fails to show “simultaneously forming an overlying gate insulator on a top and sidewalls of the gate electrode and said gate line by anodic oxidation of said gate electrode and said gate line to reduce the dimensions of said gate electrode and said gate line.., as required by Applicant’s claim.

The Examiner carefully reviewed the portions of the specification pointed out by the Applicant to find support for the language of the claim, however found no such support. Applicant’s specification on pages 5, lines: 24 through page 6, line:13; Page 6, lines: 22-Page 7, line:4; Page 21, lines:19-24; Page 22, lines:23-30, in addition to Figs 1, 3E and 3G all demonstrate anodic oxidation of only the gate electrode and does not teach nor suggest anodic

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oxidation of the gate line. Applicant's specification fails to teach anodic oxidation of the gate line at all, let alone doing so simultaneously with the gate electrode.

In order for a simultaneous anodic oxidation to occur between the gate electrode and gate line, the gate line must be exposed to the anodic oxidation fluid along with the gate electrode. It cannot be blocked by another layer because such a layer would prevent the gate line from oxidizing. There is no indication from Applicant's specification that the gate line is exposed during oxidation. There is no showing of whether the gate line is formed beneath or above the gate electrode.

Moreover, the specification suggests that the gate line is separate from the gate electrode and therefore not patterned from the same layer. On pages 38-40 of Applicant's specification, there is a detailed teaching for Figs 11A-11C which demonstrate of the formation of the gate electrode and its subsequent anodic oxidation. This passage suggests that the Applicant's method would not simultaneously oxidize the gate electrode and line. The specification teaches that the gate electrode material is formed, masked, and patterned to form an electrode structure. The specification teaches that after formation of the gate electrode, the gate structure is then subsequently connected to a gate wire 157. Therefore the specification teaches gate electrode is not the same layer as the gate wire; moreover it suggests that the gate wire is formed prior to the gate electrode. To further complicate matters, gate wire 157 is described in the specification, however not shown in Figs 11A-11C.

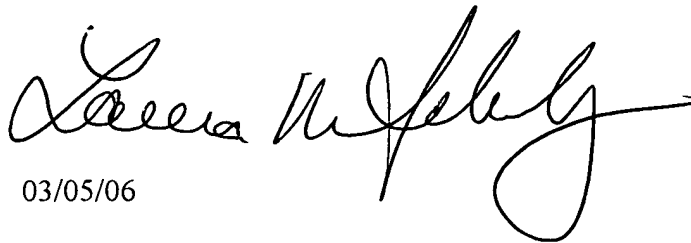
### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Laura M. Schillinger', with a large, stylized flourish at the end.

Laura M Schillinger  
Primary Examiner  
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03/05/06